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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,262	06/18/2004	David Neville Prugh	PR0031USPCT	9346

7590 02/27/2006

E.I. Du Pont De Nemours and Company
Legal Patent Records Center
4417 Lancaster Pike
Wilmington, DE 19805

EXAMINER

EASHOO, MARK

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,262

Applicant(s)

PRUGH ET AL.

Examiner

Mark Eashoo, Ph.D.

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1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonard et al. (US Pat. 5,587,184) in view of Nelson et al. (US Pat. 6,813,820).

Leonard et al. teaches the basic claimed die or process, comprising: first and second plates each having lips terminating in a die exit/orifice and various locations for adjustment (fig. 4); and a means for adjustably connecting the first and second plates such that gap between the plate lips is controlled (fig. 4).

Leonard et al. does not teach a shim having a top and bottom seats that contact first and second plates respectively, thereby forming a slot therebetween. However, Nelson et al. teaches shim having a top and bottom seats that contact first and second plates respectively, thereby forming a slot therebetween (figs. 7-8). It is also note that Nelson et al. teaches connecting the die plate and shim in multiple locations (figs. 7-8). Leonard et al. and Nelson et al. are combinable because they are from the same field of endeavor, namely, extrusion/coating dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have used a shim having a top and bottom seats that contact first and second plates respectively, thereby forming a slot therebetween, as taught by Nelson et al., in the apparatus/process of Leonard et al., and would have been motivated to do so because Nelson et al. suggests that use of a shims forms a gap size that is closer to the desired size and thereby requires smaller lip adjustments during operation (ie. a more uniform product is formed).

Claims 2-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leonard et al. (US Pat. 5,587,184) in view of Nelson et al. (US Pat. 6,813,820) as applied to claim 1 above, and further in view of Moore (US Pat. 3,102,302).

Leonard et al. teaches the basic claimed die and process as set forth above. Leonard et al. does not teach a helical spring located on the outer surface of a plate that acts upon a coupling member or bolt head, but does teach and actuator that is located on the outer surface of a plate that acts upon a coupling member or bolt head (fig. 4). Nonetheless, Moore teaches a helical spring located that acts upon a coupling member or bolt head to cause a bias force used to adjust a die gap (figs. 1-2). Leonard et al. and Moore are combinable because they are from the same field of endeavor, namely, extrusion/coating dies. At the time of invention a person of ordinary skill in the art would have found it obvious to have used a helical spring located that acts upon a coupling member or bolt head to cause a bias force used to adjust a die gap, as taught by Moore, in the apparatus/process of Leonard et al., and would have been motivated to do so because Moore suggests that such spring is and equivalent and alternative means of providing a bias force used to adjust a die gap.

Response to Arguments

Applicant's arguments filed 30-JAN-2005 have been fully considered but they are not persuasive, because:

A.) Applicant's argument is essentially based upon the premise that Nelson et al. sought to eliminate the need for controlling the gap or slot thickness of a die. However, the examiner disagrees and rather interprets the

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teachings Nelson et al. as being an improvement to the initial uniformity of the slot thickness at the time of die set up thereby reducing large initial adjustments (2:12-20). Furthermore, applicant's argument ignores that Nelson et al. allows flexibility to a die by the addition or removable of shims (3:39-43) and that the useful operating range (ie. the preset slot thickness) of a die can be expanded by using shims (11:45-47).

It is also noted that if applicant's argument were correct and the placement of a shim were to eliminate the need for all other slot thickness controls, then it is suggested that the high degree of uniformity would be unachievable by such shim system. Nelson et al. acknowledges this as use of a shim allows for a die manifold to effectively be adjusted and thereby compensate for variations in material composition, fluid rheology, flow rate through the die, as well as operating conditions of the die (11:45-12:3). Without other slot thickness control means, the shim would effectively need to be changed for every minor variation in processing temperature, flow rate variance, etc. Such changes would require the process to be shut down while the die is opened up to exchange shims. Accordingly, it is again noted that Nelson et al. appear to be an improvement to the initial uniformity of the slot thickness at the time of die set up thereby reducing large initial adjustments and not a substitute for normal process control of the slot thickness during operation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

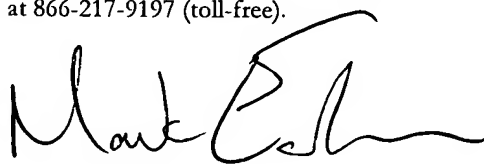
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Eashoo, Ph.D.
Primary Examiner
Art Unit 1732

me
February 16, 2006

16/Feb/06